

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P387436

Luminaire Tested: **14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P387436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2308.7 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

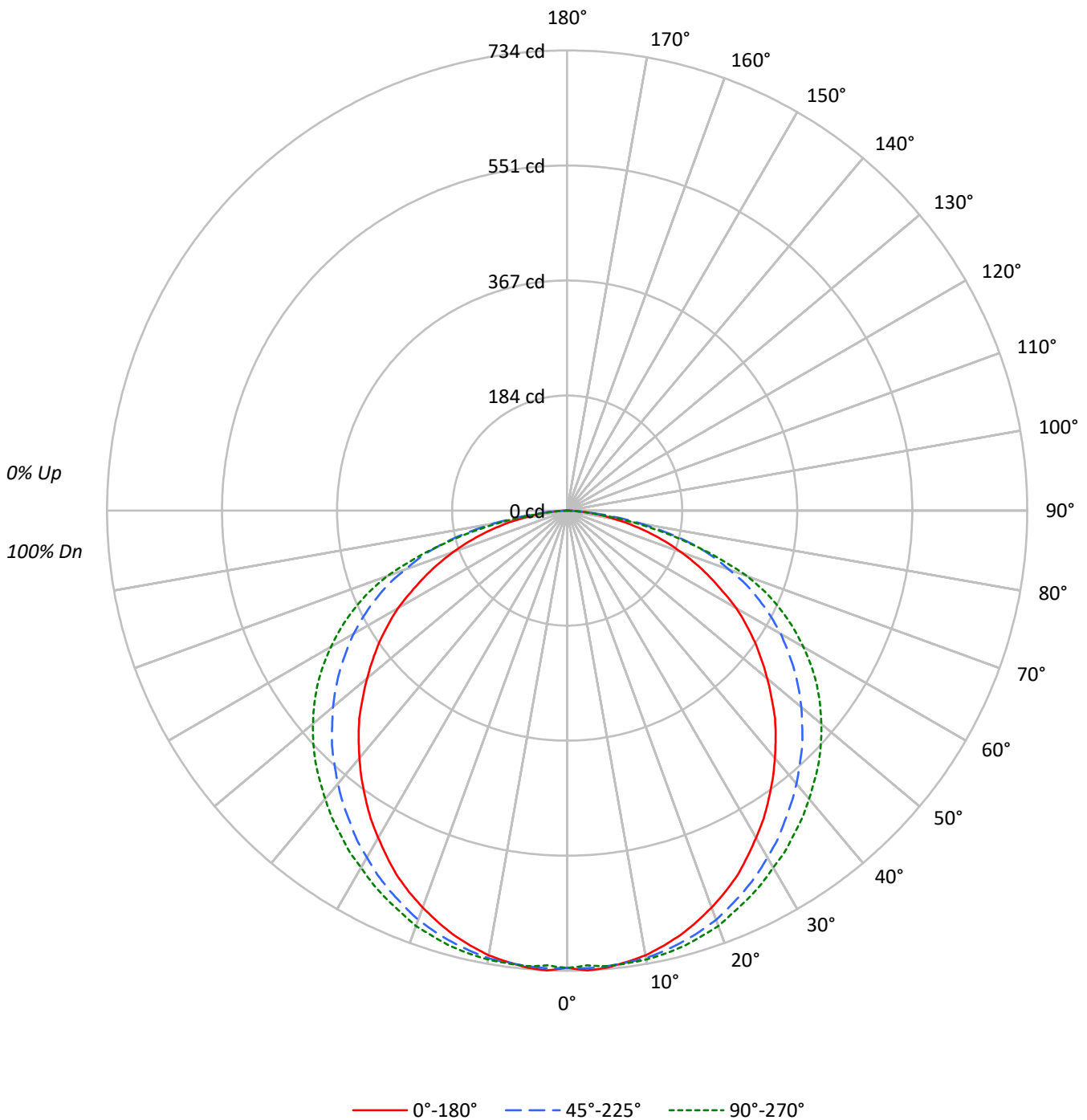
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387436

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387436

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1963	1963	1963
5°	1977	1971	1971
10°	1968	1981	1987
15°	1952	1984	2003
20°	1929	1989	2019
25°	1907	1987	2028
30°	1873	1985	2043
35°	1842	1988	2072
40°	1811	1999	2109
45°	1784	2019	2161
50°	1744	2041	2216
55°	1714	2075	2282
60°	1678	2117	2342
65°	1600	2156	2401
70°	1520	2161	2399
75°	1391	2153	2117
80°	1190	1839	1641
85°	936	1041	611



TEST NUMBER: P387436

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	3.0
10°-20°	200.3	8.7
20°-30°	306.3	13.3
30°-40°	375.4	16.3
40°-50°	403.8	17.5
50°-60°	388.0	16.8
60°-70°	323.1	14.0
70°-80°	198.3	8.6
80°-90°	44.2	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	575.9	24.9
0°-40°	951.4	41.2
0°-60°	1743.1	75.5
0°-90°	2308.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2308.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	732	725	730	730	730	69
15°	700	698	712	717	719	197
25°	642	648	669	677	683	295
35°	561	575	605	621	631	351
45°	469	490	531	555	568	361
55°	365	397	442	472	486	326
65°	251	290	339	366	377	249
75°	134	174	207	206	204	142
85°	30	45	34	23	20	36
90°	0	0	0	0	0	



TEST NUMBER: P387436

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L935-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.6	729.6	729.6	729.6	729.6
2.5°	734.2	727.2	730.7	729.6	726.1
5°	731.9	724.9	729.6	729.6	729.6
7.5°	726.1	720.3	727.2	728.4	728.4
10°	720.3	715.6	724.9	726.1	727.2
12.5°	711.0	707.5	719.1	721.4	723.8
15°	700.5	698.2	712.1	716.8	719.1
17.5°	687.7	688.8	704.0	709.8	712.1
20°	673.7	677.2	694.7	700.5	705.1
22.5°	658.6	663.2	681.9	688.8	693.5
25°	642.3	648.1	669.1	677.2	683.0
27.5°	622.5	631.8	655.1	665.6	671.4
30°	602.7	613.2	638.8	651.6	657.4
32.5°	583.0	594.6	623.7	636.5	645.8
35°	560.8	574.8	605.1	621.4	630.7
37.5°	538.7	555.0	587.6	606.2	616.7
40°	515.5	532.9	569.0	589.9	600.4
42.5°	492.2	512.0	549.2	572.5	584.1
45°	468.9	489.9	530.6	555.0	567.8
47.5°	442.2	467.8	508.5	536.4	549.2
50°	416.6	444.5	487.5	516.6	529.4
52.5°	391.0	420.1	465.4	495.7	508.5
55°	365.4	396.8	442.2	472.4	486.4
57.5°	338.6	371.2	417.7	449.1	461.9
60°	311.8	345.6	393.3	422.4	435.2
62.5°	280.4	320.0	366.5	395.6	407.3
65°	251.3	289.7	338.6	366.5	377.0
67.5°	222.2	261.8	309.5	335.1	344.4
70°	193.2	232.7	274.6	299.0	304.9
72.5°	164.1	203.6	243.2	257.2	254.8
75°	133.8	174.5	207.1	206.0	203.6
77.5°	104.7	144.3	164.1	155.9	152.4
80°	76.8	115.2	118.7	110.5	105.9
82.5°	52.4	82.6	74.5	65.2	60.5
85°	30.3	45.4	33.7	23.3	19.8
87.5°	12.8	11.6	3.5	3.5	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)